HIV Nursing matters

A publication of the Southern African HIV Clinicians Society

Cervical cancer & HIV

Self-management for adults living with HIV

Integrating HIV care into chronic care services

Maternal depression & antidepressants

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SOUTHERN AFRICAN HIV CLINICIANS SOCIETY CONFERENCE
13-16 APRIL 2016 • SANDTON CONVENTION CENTRE, JOHANNESBURG

SOUTHERN AFRICAN HIV CLINICIANS SOCIETY

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Register for the Southern African HIV Clinicians Society Biennial Conference 2016
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Our 2016 Conference programme has been carefully designed to benefit all health care practitioners. We are confident that nurses will both enjoy and derive a great deal of value from all Conference activities and thus, we encourage nurses to engage with all of the sessions and presentations. Topics such as new antiretroviral drugs, AIDS-related complications, opportunistic infections, promoting adherence and ethical issues will all be covered. However, we would like to highlight some of the sessions that focus strongly on the issues that nurses face. These include:

- Nurse's perspective in operationalising Batho Pele
- The nurse's key role in adherence
- TB diagnosis at PHC level
- HIV drug resistance made easy
- Alternatives to 1st line drug regimens (Plenary talk)
- Strategies to end the epidemic (Plenary talk)
- Lessons from the region (Plenary talk)

Nurses' Registration Fee
R1 950.00

JOIN US IN 2016!

There will be practical sessions as well, such as case studies and skills-building workshops, and fascinating professional ethics sessions. The Conference is also a fantastic opportunity to network with your fellow health care workers and researchers in the field of HIV. The Society would like to encourage nurses to attend the Conference and have thus created a reduced registration fee for nurses. Additionally, nurses can apply for bursaries that cover part or all of their registration fee. If you need assistance with negotiating a group registration rate and finalising registration through your facility, or require assistance in completing the bursary application, email Estie on estie@soafrica.com

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·THE·MONUMENT·TRUST·

Guest editorial

Prof. Hester C Klopper, PhD, MBA, FANSA, FAAN, ASSAf
Chief Executive Officer of FUNDISA

By 2030, if the United Nations has its way, there will be ZERO new HIV infections. At the 18th International Conference on AIDS and STIs in Africa (ICASA) held on 29 November - 4 December 2015 in Harare, Zimbabwe, Dr Frank Owusu-Ofori, UNFPA Country Director, stated that attaining a ZERO HIV infection rate in Africa is possible. This calls for an integrated approach, and therefore the timely theme of this edition: *HIV and integration*.

Merriam-Webster defines integration as the act or process of uniting different things; and the practice of uniting people from different races in an attempt to give people equal rights, and racial integration. In order for successful integration to be achieved in the post-MDG framework, it will take leadership and commitment. Leadership with a vision to strengthen science-based evidence.

As Jaevion Nelson, a youth activist from Jamaica, says, "Far too many programmes are failing because they are not based on the evidence that exists. We must all – as governments, as civil society and the international community – do the right thing."

Adding her voice, Helen Clark, former prime minister of New Zealand, calls for less punitive measures when dealing with people living with HIV/AIDS and requests the integration of services. Integration should be high on the health care practitioner's list. We have seen global rates of new HIV infections steadily decline over the past decade, with the annual rate falling by nearly 25% between 2001 and 2009. Unfortunately, an estimated 7 000 new HIV infections continue daily, and this out-paces the capacity to extend access to treatment and cope with the effects of HIV. Globally, 37 million people are living with HIV. If we want to make a difference, it will mean a joint effort between different services and all the health care professions, at all levels of service delivery.

One way to achieve this, is to focus on self-management. The article in this issue by Crowley (p. 23) provides a useful guide for self-management of adults living with HIV, while Tshabalala (p. 8) provides insights on how to integrate HIV services into chronic care. Another important area of concern is HIV and how it impacts on women's health. Three articles place the spotlight on this, namely: 'Cervical cancer and HIV' by Chibwesha and colleagues (p. 19), 'Maternal depression and antidepressants' by Honikman *et al.* (p. 12) and 'A personal account of taking PEP in pregnancy' by Howell (p. 26).

In conclusion, Bill Clinton said, "We live in a completely interdependent world, which simply means we cannot escape from each other. How we respond to HIV/AIDS depends, in part, on whether we understand this interdependence. It is not someone else's problem. This is everybody's problem." Let us move forward on our mission to integrate services and ensure that all have equal access to health care.

HIV Nursing
matters

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Message from the president

Dr Francesca Conradie
President, Southern African HIV Clinicians Society

As we begin a new year, it is time for reflection. What have the highlights been? And looking forward, what do we wish to achieve?

In the treatment of HIV, we have seen a considerable change in when to start ART. In early 2015, we increased the entry CD4$^+$ count from 350 to 500 cells/µl. In addition, all HIV-infected pregnant women are now eligible for lifelong ART, as are all patients who have tuberculosis (TB). We are relying less and less on CD4$^+$ count criteria to decide when to start. This is a substantial change in our way of thinking. We need to start communicating this to our patients. What we need to centre the education on is the viral load; this is the most important measure of how a patient is doing. In September 2015, the World Health Organization (WHO) released new guidelines stating that all HIV-infected individuals should receive ART. While this has not yet been adopted by our National Department of Health, I foresee that this will occur within a year or so. So again, we will need to adjust our thinking.

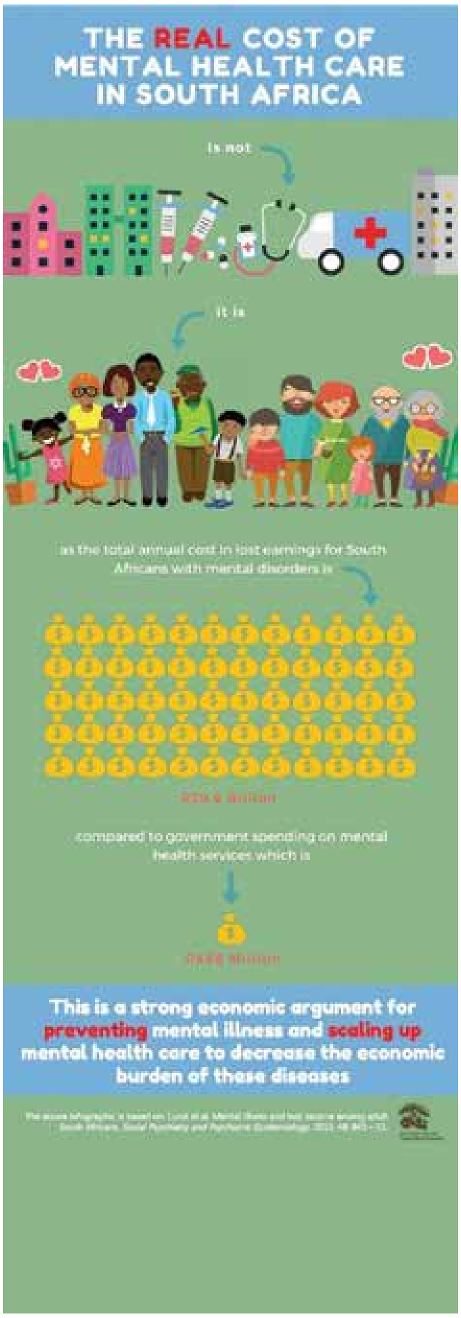
What does this increase in CD4$^+$ count mean to us on a day-to-day basis? We need to treat more patients. And, the more we treat, the greater the number of other conditions we will be encountering in our patients. We have talked about TB and HIV integration for years. We know the principles: everyone with TB must be tested for HIV and everyone with HIV must be screened for TB. It is now second nature to us. But, as we treat more and more, we will encounter other conditions more commonly including hypertension, diabetes, epilepsy, chronic obstructive pulmonary disease (COPD) and mental illness. We need to know how to manage all of these. Remember: patients do not see the need to visit a number of clinics; while they know they have a number of conditions, what matters to them is getting these conditions resolved as quickly as possible. So, lots to be done ...

Please do not forget that the Society is holding its third conference in April this year. Please register soon. I can promise that you will leave the conference knowing more than when you arrived; and you will make new connections at the same time. What I love about our conference is that we can all get together and discuss not only the issues we face, but also the victories we have won.

Have a wonderful and fruitful 2016.

Report:
Integrating mental health into primary health care in low- and middle-income countries

Published by **Health-e News** on 3 November 2015



In this *British Journal of Psychiatry* supplement, the Programme for Improving Mental Health Care (PRIME) outlines district mental health care plans from five low- and middle-income countries.

In an introductory editorial, PRIME Director Crick Lund argues that the challenge in scaling up mental health services in low- and middle-income countries is not what activities to implement, but how to implement them. To help gather more information on how to integrate mental health services into primary health, PRIME and partners examined district health models in countries such as Ethiopia, India and Nepal.

The organisation also looked at implementation in South Africa's National Health Insurance pilot site, the Dr Kenneth Kaunda district in the North West. There, PRIME researchers focused on the inclusion of mental health in an integrated chronic disease management platform.

Researchers found, as in India, limited mental health screening and treatment. The research identifies strategies for addressing these challenges, including: management workshops for facility and district managers; the strengthening of the mental health component of the Primary Healthcare 101 clinical and training guidelines; and clarifying the roles of primary care nurses and community counsellors.

\- **Health-e News**

SA Health Review 2015:
Nursing in crisis

Published by **Health-e News** on 21 October 2015

> Nursing is in crisis, with huge shortages, declining interest in the profession, lack of a caring ethos and an apparent disjuncture between nurses' needs and those of the communities they serve.

In 2010, the Department of Health estimated that the country was short of over 44 700 nurses; yet we only train around 3 500 new nurses a year.

This is according to Wits University's Professors Laetitia Rispel and Judith Bruce, writing in the *SA Health Review* released last night.

While 133 127 professional nurses are registered with the SA Nursing Council nationally, only slightly more than half (68 105) work in public health. Yet, nurses are the backbone of the public health system.

> In 2010, the Department of Health estimated that the country was short of over 44 700 nurses; yet we only train around 3 500 new nurses a year.

The shortage has resulted in a rise in nursing agencies which provide temporary nurses, which the authors describe as a worrying "casualisation" of the workforce.

Between 2005 and 2010, provinces spent R1.5 billion on agency nurses to supplement shortages. Yet hospital managers reported that such nurses often provided sub-optimal care to patients, were unco-operative, had poor relationships with doctors and were "reluctant to perform certain nursing interventions".

The acute shortage of skilled intensive care unit (ICU) nurses meant that these nurses were much more likely to "moonlight" for other institutions than any other category of nurses.

In a survey of over 3 700 nurses, over a quarter (28%) reported that they had "moonlighted" in the past year, with 70% saying that they did so because they needed more money.

Over half reported being "too tired to work", while almost a third – mostly women aged 25 - 34 – planned to quit their jobs within a year.

Over four in 10 (43.7%) nurses are over the age of 50, and younger women are less inclined to become nurses.

In addition, as primary health care has been prioritised, more nurses are required to work in clinics rather than hospitals; yet many report sub-standard working conditions.

Nursing managers at the clinics said a shortage of staff was one of the biggest problems and resulted in long waits by patients. This was followed by delayed emergency medical services for patients, and poor infection control linked to interrupted water supply.

In addition, "several layers of bureaucracy" involving the clinic supervisor, area manager and district manager meant that clinic managers did not have decision-making powers. This "stifled their work environment" and contributed to "a great deal of personal distress".

The fact that the South African Nursing Council "is largely dysfunctional" as a regulatory body and provides "sub-optimal leadership in policy development and implementation", does not help the plight of nurses.

"Revitalising nursing requires concerted efforts by government and key stakeholders to improve and modernise resources for a positive work environment," they conclude.
- **Health-e News**

World Health Organization calls for treatment for all

Published by **Health-e News** on 1 October 2015

In a landmark move, the World Health Organization (WHO) has recommended that all people living with HIV are started on treatment as soon as possible following diagnosis.

If South Africa (SA) adopted the new WHO guidelines, about an additional 3 million people would be eligible for treatment, according to UNAIDS.

Released yesterday, the new WHO guidelines recommend that people living with HIV are started on antiretrovirals (ARVs) as soon as possible after being diagnosed. Currently, many people living with the virus, globally and in South Africa, must wait until their CD4 counts – a measure of the immune system's strength – fall to 500 cells/µl to start treatment.

According to the WHO, the move to early treatment – or what some have dubbed the "test-and-treat" model – is backed by the latest research.

Recently, several clinical trials have shown that early access to ARVs keeps HIV-positive people alive and healthier, while also reducing the risk of transmitting the virus to partners.

In May, a 4 685-person randomised clinical trial conducted in 35 countries became the first study of its kind to show that HIV-positive people who started ARVs early reduced their risk of serious medical problems, such as liver disease and AIDS-defining cancers, by about 60%.

The new WHO guidelines also call for people at high risk for HIV to be offered ARVs to prevent infection – also known as pre-exposure prophylaxis (PrEP). This follows calls from the global body in 2014 to provide HIV-negative men who have sex with men with ARVs, after studies showed that ARVs could reduce the risk of contracting HIV by as much as 92%.

Regarding men who have sex with men at a higher risk for HIV, a recent Human Sciences Research Council study found HIV prevalence rates as high as 48% among men who have sex with men in Durban.

Guidelines come as early surprise

Many, including SA's own National Department of Health Deputy Director General, Yogan Pillay, had anticipated that the WHO would issue the ground-breaking call in December.

Globally, many countries including SA take a cue from the WHO when drafting their own guidelines. New WHO guidelines do not mean that SA will automatically adopt the test-and-treat model, but it may be an added push for the country, which has already begun to mull the move over.

"South Africa is considering the test-and-treat strategy and, in principle, we will be moving towards test and treat," said CEO of the South African HIV non-profit the Right to Care, Dr Ian Sanne. "The idea is that we would require less laboratory monitoring (of CD4 counts) ... there would be an overall simplification of the programme to bring more people onto treatment quickly."

Sanne added that ARVs remain one of the best options for HIV prevention. "ARVs have proven to be the only intervention that really reduces HIV transmission," he told Health-e News. "(They) are still better than any other prevention intervention undertaken, this include microbicides, and they are better than condom use."

If the WHO's recommendations are implemented in SA, it would mean that about 3 million more South Africans would be eligible for ARVs.

Speaking at an Mpumalanga Provincial AIDS Council meeting on Tuesday, South African National AIDS Council HIV Counselling and Testing Advisor, Rev. Zwoitwaho Nevhutalu, called for the country to rethink HIV testing in the run up to adopting the test-and-treat model. Nevhutalu also advocated that the Department of Health considers promoting HIV self-testing to increase HIV diagnoses.

If the WHO's recommendations are implemented in SA, it would mean that about 3 million more South Africans would be eligible for ARVs. If the world adopted test-and-treat, an additional 9 million people would be started on the life-saving medication.
– Health-e News.

Integrating HIV care into chronic care services

Dr Khanyi M Tshabalala, MB ChB (UCT), Dip HIV Man (SA)
Clinical advisor, Anova Health Institute, Johannesburg, South Africa

Although not all facilities will be able to integrate their services according to the model proposed in the ICSM manual, attempts should be made as far as possible to integrate HIV services into all other chronic disease services.

Introduction

Since the early 1990s, South Africa (SA) has seen the HIV prevalence steadily rise in the country, now to plateau at the highest burden globally.[1] The response and rollout of HIV services have evolved since the inception of the programme in 2004 to suit the ever-changing and -growing population needs.[2,3]

At the inception of SA's antiretroviral (ART) programme, HIV was still a disease that most clinicians did not have the required skills to manage. Thus, HIV care was centralised to hospitals to be managed primarily by doctors. However, there existed a mismatch between available clinicians and the growing pool of sick patients who urgently required life-saving ARVs. In response to this scenario, decentralisation of HIV services to primary health care facilities (PHC), coupled with the training and mentoring of nurses to manage HIV at a primary health care level, was introduced in 2010.[4]

Historical organisation of PHC services

Due to life-saving ART, the life-expectancy of people living with HIV has increased, shifting the perception of HIV from being an acute illness to a manageable chronic condition.[1] Although HIV care had been decentralised to the PHC facilities, services within the facility were still segregated. This translated to HIV clinics running vertically to other services within the same facility. With an ageing HIV-positive population, the emergence of other chronic conditions such as hypertension and diabetes becomes inescapable. This same pool of patients would need to access the health facility at different points and often times on different days in the month in order to receive treatment for all their medical conditions. The system in its current state is inefficient and taxing to both the clinicians and the patients.

Table 1: Comparing the different models of service provision

Disadvantages of vertical services	Advantages of an integrated model of care
Multiple service points for one individual in the same facility	Single point of entry for all services leads to reduced time spent in the facility
Multiple visits for the same individual in a month can lead to loss of income	Booking system for those on chronic treatment has allowed better work scheduling and planning in facilities
Hinders holistic management of patients	Provision of comprehensive package of care to the patient
Indirect disclosure of HIV status	Avoidance of stigma through forced disclosure
HIV management skills only acquired by few nurses leading to collapse of services when skilled nurse is not on duty	All primary health care nurses encouraged to acquire skills to treat all chronic conditions, including HIV

Integrated chronic services management

In an attempt to address these inefficiencies in health service delivery at primary level, as evident in the findings of the National Healthcare baseline survey of 2012, integrated chronic systems management (ICSM) was introduced as a model of service provision by the National Department of Health (NDoH) in 2014.[5] The development of the model was informed by the World Health Organization's (WHO's) document entitled "Innovative care for chronic conditions". The WHO defines integrated services as "the organisation and management of health services so that people can get the care they need, when they need it, in ways that are user-friendly, achieve the desired results, and provide value for money".

The ICSM model puts emphasis on better systems to deliver services which can only be achieved through the use of data for planning, assessing current patient flow and re-organising services into three main streams of care: acute, preventive (including maternal and child health services), and chronic services. The purpose of these distinct streams of care is to facilitate easy access and flow of patients directly to their desired service point. These service points should ideally be distinguishable through physical segregation in the physical infrastructure as well as with clear, colour-coded signage.

Planning, booking and spacing of appointments are recommended to address the congestion in facilities as well as long waiting times. The ultimate goal of ICSM is to achieve a more efficient health system while simultaneously equipping patients to take responsibility for their own health care and eventually to transition to self-managed care in the community.

Implementation in the Johannesburg Health District and the role of Anova Health Institute as a supporting partner

Anova Health Institute supports 78 PHC facilities in four sub-districts across the Johannesburg health district. As an organisation with capacity and skills in training, providing technical assistance and overall health systems strengthening, we were well positioned to support the rollout of the ICSM model.

The rollout took place over a number of months in a step-wise manner, beginning with the orientation of provinces, districts and various district support partners by the NDoH. This was followed by training of facility staff and managers on the tools and implementation process which started in October 2014, using the NDoH ICSM manual.

The greatest accomplishment with the rollout of the training can be attributed to providing practical training to the right individuals. We trained facility managers who would be crucial in supporting and monitoring progress in implementation, together with their identified ICSM champions. As part of the training, each duo was tasked to bring 3 months' data from their facility (data on monthly facility headcount, number of patients on chronic treatment, staff establishment as well as their skills audit), together with their facility floor plans showing how services are structured within their facility. With assistance from the training facilitators, each duo was aided in planning for ICSM implementation and re-organising the flow of patients in line with the ICSM model. Participants were taught how to use the tools in the ICSM manual developed by the NDoH to conduct baseline audits of staff skills, monthly facility/patient data, and facility waiting times. The concept of the "ideal clinic" and the requirements to reach this desired state were introduced as an expansion of the ICSM model.

Multiple visits for the same individual in a month can lead to loss of income

Through these sessions and skills audits – conducted as part of the training – gaps in chronic disease management knowledge among nurses were identified as a key challenge to integrating services. Primary Care 101 (PC101), which is a symptom-based, algorithmic, clinical management guideline tool, was introduced as a means to bridge this gap in knowledge.[6] Training on PC101 is thus an essential component to the success of ICSM implementation.

Figure 1: The three streams of ICSM.

Figure 2: Process of ICSM implementation.

Beyond training

A district task team was formed to support, monitor and report on the implementation progress at regular, set time intervals.

Following the training, participants were tasked to go back to their facilities, not only to share with their colleagues, but also to begin implementation with the support of the partner mentors. The pace at which facilities have implemented the ICSM model differs due to different challenges both in infrastructure as well as professional skills of the existing staff. All facilities have at the very least conducted baseline audits and are implementing aspects of the ICSM model, such as booking systems for patients on chronic treatment. PC101 training as well as NIMART mentorship continues in the district to ensure that nurses are well equipped to manage patients with chronic diseases including HIV.

Lessons learnt

- Communication with clients and all stakeholders at facility level is key to the successful integration of services. All facility staff members need to be oriented around ICSM and what that means for their facility and the way they work within the facility. Health promoters, community health workers, peer educators etc. should be involved in this process of informing clients about the new structure within the facility.
- Clients need to be informed of the changes to expect the next time they visit the facility, for buy-in.
- There needs to be consultation with the pharmacy team. If chronic patients are to be booked for visits, it is best that their medication gets pre-packed before the visits and for them to be given 2 - 3 months' supply of medication at a time (unless they are due for annual blood monitoring investigations). The pharmacy needs to ensure adequate availability of stock for that part of the process.
- Data should be used to provide an overview of: how many clients are on chronic medication within the facility; how many are seen monthly; and how many can be seen daily. This would allow better planning in terms of the number of clients to be booked per day, linked with the number of staff members available daily to provide care to those clients.
- All professional nurses should be encouraged and sent for training on NIMART and PC101 so that they are able to provide comprehensive care to clients.

Conclusion

Although not all facilities will be able to integrate their services according to the model proposed in the ICSM manual, attempts should be made as far as possible to integrate HIV services into all other chronic disease services.

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www.hivhotline.uct.ac.za

The Medicines Information Centre (MIC) situated within the Division of Clinical Pharmacology, Department of Medicine at the University of Cape Town is the largest and only clinically-based medicine information centre in South Africa.

In collaboration with the Foundation for Professional Development and USAID/PEPFAR, the MIC provides a toll-free national HIV & TB hotline to all health care workers in South Africa for patient treatment related enquiries.

What questions can you ask?

The toll-free national HIV & TB health care worker hotline provides information on queries relating to:

- HIV testing
- Post exposure prophylaxis: health care workers and sexual assault victims
- Management of HIV in pregnancy, and prevention of mother-to-child transmission
- Antiretroviral Therapy
    - When to initiate
    - Treatment selection
    - Recommendations for laboratory and clinical monitoring
    - How to interpret and respond to laboratory results
    - Management of adverse events
- Drug interactions
- Treatment and prophylaxis of opportunistic infections
- Drug availability
- Adherence support
- Management of tuberculosis and its problems

When is this free service available?

The hotline operates from Mondays to Fridays 8.30am – 4.30pm.

Who answers the questions?

The centre is staffed by specially-trained drug information pharmacists who share 50 years of drug information experience between them. They have direct access to:

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Maternal depression and antidepressants

Dr Simone Honikman,[1] MPhil (Maternal & Child Health), MB ChB, MPhil
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If a patient has already become pregnant on medication, it is safer for mother and child for the medication to remain unchanged unless clinically necessary. Similarly, lack of data on newer antidepressants should not prevent their use in pregnancy. Depression during pregnancy can have severe consequences for both mother and child and should be treated more aggressively than in the non-pregnant patient.

Introduction

In South Africa, reported rates of antenatal depression average 30 - 40%.[1] This is **three times higher** than in developed countries. Antenatal depression poses a significant risk for alcohol and substance use during pregnancy, and pregnancy complications such as preterm labour, and is also one of the strongest risk factors for postnatal depression.[2,3] When women receive adequate treatment during pregnancy for antenatal depression, the progression of the mental disorder can be halted,[4] and the many intergenerational consequences avoided. This is particularly relevant in low-resource settings, where mothers face several health, economic and social challenges.

Maternal depression and HIV

People living with HIV have a higher risk (two-fold) of experiencing mental health problems.[5] People with mental health problems are at greater risk of acquiring HIV infection[6,7] and not adhering to management protocols.[8,9]

The high prevalence of maternal depression thus makes mothers particularly vulnerable to the physical and emotional problems associated with HIV. This is made more relevant as mothers frequently learn their HIV status during pregnancy and are required to commence and adhere to PMTCT and antenatal care regimes – while experiencing the challenges associated with low mood, low self-esteem, a sense of hopelessness and low energy.

See article: "Common Perinatal Mental Disorders and HIV", HIV Nursing Matters June 2014;5(2):24-29 for more about this.

The use of antidepressants during pregnancy

The first-line treatment for depression during pregnancy is psychotherapy.[10] However, in instances of moderate to severe depression, pharmacological treatment is usually needed in addition to therapy. This would need to be prescribed by an authorised mental health nurse, doctor or psychiatrist. Furthermore, access to therapy is often limited and antidepressants may be the only treatment option available. The concern about any medication use during pregnancy is the effect on the

foetus. With antidepressants, the major concerns have been centred around teratogenecity (particularly cardiac defects), the risk for persistent pulmonary hypertension in the newborn and neurodevelopmental effects (in particular, an increased risk for autism).[11] Information about antidepressants may be found in the text box below.

Information about antidepressants

- May have minor side-effects, especially in the initial 2 weeks of treatment
- Must be taken for at least 6 - 12 months, once symptom control has been achieved, to prevent relapse
- May also be used to treat anxiety disorders

Several antidepressants have been reported to be relatively safe to use during pregnancy.[12,13] To date we have the most safety data for selective serotin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs). Fewer data are available for venlafaxine and bupropion and little to no data exist for other antidepressants.

- *TCAs:* Clomipramine and imipramine are probably the safest drugs in terms of teratogenicity, as no increased teratogenic risk has been found with these agents.[14] However, they are generally used as second-line agents due to their adverse side-effect profile. This includes postural hypotension, which can be a significant problem in a pregnant patient. TCAs can be lethal in overdose.

- *SSRIs:* Large population-based studies have found no increase in the rates of major congenital malformations in infants exposed to SSRIs, with the exception of paroxetine, which has been associated with an increased risk for fetal ventricular and/or atrial septal defects with first-trimester exposure. Paroxetine is consequently best avoided during pregnancy.[15] Of the remaining SSRIs, citalopram/escitalopram and sertraline appear to be the best tolerated in pregnancy.

  While early studies suggested the possible increased risk of persistent pulmonary hypertension in the newborn (PPHN) with SSRI use in pregnancy, a recent meta-analysis of published studies found that though exposure in late pregnancy was associated with a slight increased risk for PPHN, the clinical risk remains low, with an estimated 286 - 351 women needing to be treated to result in an average of one additional case.[16]

  It is currently unclear whether SSRI (and other antidepressant) use during pregnancy is associated with an increased risk of autism spectrum disorders. The two largest population-based studies have shown conflicting results.[7,18] However, both these studies point out multiple confounding factors including the possible effect of depression itself on risk for autism spectrum disorders. Furthermore, Rai *et al.*[17] point out that the increased risk of autism spectrum disorders found in their study was very small and must be balanced against the risks of untreated depression.

- *Other antidepressants:* There are few data available on the safety of other antidepressants in pregnancy. Thus, non-SSRI antidepressants are probably best used as second- or third-line agents.

However, as always in medicine, the specific needs and response of the individual patient must be taken into account. If a patient has already become pregnant on medication, it is safer for mother and child for the medication to remain unchanged unless clinically necessary. Similarly, lack of data on newer antidepressants should not prevent their use in pregnancy. **Depression during pregnancy can have severe consequences for both mother and child and should be treated more aggressively than in the non-pregnant patient**.

Effects of untreated maternal depression for the mother and her child

While no medication is 100% safe during pregnancy, the potential risks of antidepressant use must be weighed against the **risks of untreated maternal depression.** Indeed, untreated antenatal depression is associated with poor foetal and child outcomes,[19,20] as well as poor maternal health outcomes.[21] The discontinuation of antidepressants during pregnancy, for woman who had a pre-diagnosis of depression, should also be considered carefully, and is not recommended: it is associated with a high risk of relapse during and after pregnancy, and a high risk of suicide.[22] Further effects of untreated maternal depression are listed in the adjacent text box.

People living with HIV have a higher risk (two-fold) of experiencing mental health problems

Effects of untreated maternal depression

Poor foetal and infant outcomes[19]

- Increased risk of preterm labour and small for gestational age
- Poor maternal-infant attachment
- Lower cognitive and social functioning in infants
- Lower language achievements
- Increased behavioural and psychiatric problems in childhood

Poor maternal health outcomes[21]

- Poor uptake of health care services, including antenatal care and HIV prevention and treatment protocols
- Poor nutrition
- Medical and obstetric complications, including preterm labour
- Increased risk of substance misuse
- Increased risk of relapse in the postpartum period
- Psychotic symptoms
- Suicide

Antidepressants during breastfeeding

Antidepressants are excreted in breastmilk, yet usually in extremely small doses.[23] Studies investigating the exposure of infants to antidepressants through breastfeeding report no differences in developmental milestones.[24] **There is usually no reason why antenatal pharmacotherapy should not be continued for breastfeeding women in the postpartum period, unless the infant is underweight or unwell.** Where one has to initiate medication, the benefits versus potential risks for the mother and the infant must be considered. In the South African context, the risk of not breastfeeding and the consequent increased risks of malnutrition, diarrhoea and respiratory illness must be taken into account.

Antidepressants and antiretrovirals

Given the two-fold increased risk of depression in women living with HIV, many of these women will be taking or need to take antidepressants during pregnancy. Of the antidepressants available in the public sector, citalopram is the antidepressant of choice, as it has few drug-drug interactions. It should therefore be the first-line agent in women on highly active antiretroviral treatment (HAART) who are starting an antidepressant in pregnancy. However, if a woman is already on an antidepressant, this should not be stopped or changed without a mental health consult, as the risk of relapse outweighs any other risks.

Conclusion - a practical approach

Regardless of the severity of a woman's symptoms, it is essential that she is made aware of the relative risks of antidepressant use as well as the impact of untreated antenatal depression and anxiety.[11] This discussion needs to take place using sensitive and gentle care so as not to increase anxiety or guilt in the vulnerable woman. It remains the woman's choice either to initiate or continue her pharmacological treatment, or to choose non-pharmacological treatment.

In cases of moderate to severe antenatal depression, **antidepressants can improve the effectiveness of counselling** interventions.[25] Providing access to antidepressants for severely depressed women not only overcomes the debilitating effects of depression and anxiety but also increases the likelihood of taking up counselling and general health services.[9] Tips for supporting mothers on antidepressants may be found in the text box below.

Non-prescribing health workers can play a vital role in supporting mothers around their decision to take antidepressants. Health workers are also critical in the process of supporting adherence to antidepressants.

Tips for supporting mothers on antidepressants

- Explain that the SSRIs are likely to take 3 - 6 weeks before they start to relieve symptoms.
- Explain that for the first 10 days or so on SSRIs, side-effects of feeling agitated or 'on edge' may be expected. These usually settle completely.
- Explain that antidepressants benefit symptoms of depression as well as anxiety, which often go together.
- Explain that best results are usually achieved when treatment is maintained for at least 6 - 12 months.
- Explain that antidepressants are not addictive at all.
- Explain that stopping antidepressants must be done as part of a slow weaning plan together with a doctor. If this does not happen, the person can have a bad relapse of their symptoms.
- Explain that any side-effects should be discussed with the prescribing doctor. If these side-effects do not go away, or cannot be managed, then the doctor may be able to switch to another type of antidepressant, which may have fewer side-effects in the individual.

The Perinatal Mental Health Project (PMHP) www.pmhp.za.org

The PMHP offers psychiatric referral as part of its mental health services integrated in to routine care at three Midwife Obstetric Units in Cape Town. Pregnant women who are screened to be experiencing psychological distress during pregnancy are referred for on-site counselling. In cases where symptoms are severe and disabling, women are offered additional on-site psychiatric services, which include assessment and possible prescription of medication.

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"I have a dream ... a world without HIV ..."

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Making an information video on HIV Cure

South Africa has the doubtful honour of having the largest concentration of people living with HIV (PLHIV) in any single country, about 6.4 million. We also have the largest cohort of patients currently on ARV treatment, roughly 3.4 million (300 000 privately). According to the World Health Organization, about half of those who have contracted HIV globally over time, some 39 million, have died.[1] Treatment is effective but requires compliance and a life-long commitment. Preventive measures such as prevention of mother-to-child transmission can be equally effective, yet there are 1 000 new infections in South Africa daily.[2] If we want to eradicate HIV, prevention and treatment methods alone will not be enough and a third strategy is essential: finding a cure.

Current studies are not expected to produce a cure for HIV infection, but they do represent research working towards that goal.[3] Cure research raises considerable ethical and social challenges. For example, what does cure mean in this context – eradication of the virus or some form of long-term control? Who should be enrolled in these studies? How do we handle participants in failed cure trials? And if cure becomes reality, who should be the first to benefit?

Initial formative stakeholder (patients and nurses from an HIV clinic) interviews revealed that there is limited knowledge in the community about cure research. South Africa is likely to host an appreciable portion of cure research, consequent to our high burden of disease, research expertise, and reliable regulatory system and there is clearly a

real need to educate the public about this innovative research. The Centre for Medical Ethics and Law of the Department of Medicine, University of Stellenbosch Faculty of Medicine and Health Sciences, decided to develop an educational video that focuses on cure and cure research while also emphasising prevention and treatment. Our initial video script focused on the science of HIV, but consultants in the field of community involvement in HIV prevention interventions advised that we follow a community-based approach where less is more, but where every word and fact is carefully considered. At the same time, a narrative approach was followed. The storyline is of three HIV-positive individuals, a mother, her baby and her friend, who first learn more about HIV prevention and treatment at a local clinic, and later have a conversation with an HIV researcher who informs about the current state of cure research and of recent paradigm cases which give hope (e.g., Berlin Patient, Mississippi Baby), and also explains how research is regulated and participants protected, and that no research may be done without informed consent.

We were acutely aware of our ethical responsibilities in making this video. While promoting hope is good, this should not result in unrealistic expectations on the part of study participants who are stigmatised, vulnerable and desperate for cures; we know how easily participants suffer therapeutic misconceptions. In a sense, this video promotes (future) cure research, thereby unwittingly underwriting such research when there may be particular risks involved for participants in joining these studies. Thirdly, cure as a generic term may be misunderstood by PLHIV to include also false and quack cures, or misused by those purveying such remedies to promote their own sales.

The Soweto Gospel Choir's beautiful rendition of Alan Lazar's "African Dream" was used as appropriate background music with their kind permission. Most of the cast are amateur actors; three of them work in an HIV research facility at Tygerberg Hospital (KidCru) and are closely involved in HIV research and care. The iconic Zackie Achmat wears his iconic HIV POSITIVE T-shirt when introducing us to his dream of a world without HIV. In a striking final scene South Africa's most beloved religious leader, Archbishop Emeritus Desmond Tutu, makes a powerful exhortation to a safe life linked to the hope of effective prevention, good and better treatment, and who knows, just maybe, in the future, cure.

The video was launched to a select audience of researchers, doctors who treat HIV patients and decision-makers and was well received. It was also viewed by a group of paediatric HIV clinic staff members, and was enthusiastically received. Finally, it was recently shown at the Seventh SA AIDS Conference in Durban, with good reception. We are in the process of making the video available to clinics and institutions, and it is already available on YouTube, where it can be freely downloaded and used. We would like to publicise it as widely as possible and do not retain any copyright. We have also compiled four pamphlets which we hope to make available wherever the video is shown. These respectively provide more general information on HIV, prevention, treatment and cure research. We hope that the video will lead to exchanges between patients and staff and act as a stimulus to a robust discussion on cure between staff and patients, among medical and nursing staff, and even generally in the community.

But the proof of the pudding lies in the eating ... so, in order to validate the effects of the video on improving critical (short term, mimicking an initial informed consent session) information levels in clinic patients, we devised and ran a study consisting of before-and-after viewing interviews at two sites (Western Cape and KwaZulu-Natal).

We are now making the video available to clinics and institutions. View it at: **-** – comment on the link or send comments to **bioethics@sun.ac.za** (with Video Comment in the subject line).

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3. See http://www.treatmentactiongroup.org/cure/trials for a list of trials

Cervical cancer and HIV

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The Pap smear has been the standard of care screening method throughout the world for decades and has been shown to reduce the morbidity and mortality of cervical cancer even in middle- and lower-income countries.

Cervical cancer is one of the most common cancers among women globally and comprises approximately 12% of all cancers in developing countries.[1] The most recent compilation of data indicates that an estimated 490 000 new cases of cervical cancer occur annually among women worldwide and nearly 80% of these are in developing countries where screening programmes are not well established and are poorly organised.[2] In Africa, cervical cancer comprises 23.3% of all cancers in women.

South Africa has the highest number of people estimated to be living with HIV/AIDS in the world and is one of the countries hardest hit by the epidemic. The prevalence of HIV among South African women attending antenatal visits in 2010 was 30.2%.[3] Human papillomavirus (HPV) is the main cause of cervical cancer and HIV immunosuppression is associated with a higher prevalence, incidence and persistence of HPV infection. HPV infection is a common sexually transmitted infection. Most affected women are infected shortly after beginning their first sexual relationship, with the highest prevalence seen in women under 25 years of age.[4,5]

Invasive cervical cancer (ICC) develops relatively slowly typically over


Negative **HSIL/CIN2/3** **Cervical cancer**

Figure 1: Screening and treatment of cervical dysplasia.

a period of at least 10 years, but studies have shown that ICC in HIV-seropositive women tends to present 10 - 15 years earlier than in their HIV-negative counterparts due to immunosuppression.[6,7] Over 100 HPV types have been identified, of which 40 infect the genital tract. A study in South Africa of 148 HIV-seropositive women showed a diversity of HPV types, with 95% of the women harbouring HPV, a median of 3 HPV types per participant and 85% of women having one or more oncogenic HPV types (16 accounted for 30%, followed by 30 and 35).[8] Anatomically, the cervix consists of two portions, the ectocervix and the endocervix. Ectocervix is covered by a pink, stratified squamous epithelium, and a reddish, columnar epithelium lines the endocervix. The junction between squamous epithelium and columnar epithelium is called the squamocolumnar junction (SCJ). The location of the SCJ in relation to the external os varies depending upon age, menstrual status, and other factors such as pregnancy and oral contraceptive use. The area adjacent to the SCJ is known as the transformation zone and is of great importance in colposcopy, as this is where almost all manifestations of cervical carcinogenesis occur.[9]

The Pap smear has been the standard of care screening method throughout the world for decades and has been shown to reduce the morbidity and mortality of cervical cancer even in middle- and lower-income countries.[10,11]

Pap smear results are interpreted as per Bethesda classification.[12]

1. Negative for intraepithelial lesion or malignancy

2. Squamous cell abnormality

- Atypical squamous of undetermined significance (ASCUS) – borderline changes between normal and abnormal
- Atypical squamous of un-determined significance, cannot exclude HSIL (ASCUS-H) –borderline but may be more serious
- Low-grade squamous intraepithelial lesion (LSIL) – mild cellular changes
- High-grade squamous intraepithelial lesion (HSIL) – moderate to severe cellular changes
- Invasive cervical cancer (ICC)

3. Glandular cell abnormality

- Atypical glandular cells (AGCs)
- Atypical glandular cells favour neoplastic
- Endocervical adenocarcinoma *in situ*
- Adenocarcinoma.

Cervical cancer is a preventable disease which is curable if detected and treated in its precancerous state

Occasionally, results may come with reports on CIN1/CIN2 which are equivalent to LSIL/HSIL respectively, but are often used in histology results. The adequacy or suitability of the Pap smear results on the report is very crucial in order for the results to be considered satisfactory by the cytologist. Unsatisfactory results are often due to incomplete sampling of either or both the endocervical and ectocervical squamous cells of the cervix. Both areas are needed to evaluate the complete health of the cervix. Blood and vaginal discharge/ inflammation can obscure the reading of the Pap smear rendering the results uninterpretable by the cytotechnician or cytologist. Removing the discharge and blood is important before performing a Pap smear. Women should be informed not to come for a Pap smear while menstruating. Also, if a woman has a

Table 1: National Department of Health HIV treatment guidelines[13]

Pap smear result	Referral criteria
Normal	Repeat smear in 3 years
LSIL	Repeat smear in 1 year
HSIL	Refer for colposcopy
ASCUS	Manage as LSIL
ASCUS-H	Refer for colposcopy
Glandular	Refer for endometrial investigations

Figure 2: Biopsy forceps.

sexually transmitted disease, then she should have this treated first before performing a Pap smear.

Another important aspect of the laboratory interpretation of the Pap smear is the reproductive history of the woman. The age, dates of last menstrual cycle, any hormonal therapy (including birth control) and if the patient has been treated for dysplasia before, is crucial information that should be on all requisition forms. Recommendations or comments from the cytologist are always noted on the report and can be used as a guide for further management.

All HIV-seropositive women should have a baseline Pap smear at the time of diagnosis of their HIV.

After an abnormal Pap smear (either HSIL, ASC-H or persistent LSIL (defined as two LSIL Pap smears at least a year apart), the woman should be referred for a colposcopy. This test involves wiping the cervix with a solution of either acetic acid (vinegar) and/or iodine. The cervix is then looked at with a special lamp called a colposcope. This procedure allows abnormalities of the cervix to be seen and a biopsy is taken and sent to the laboratory.

Cervical intraepithelial neoplasia (CIN), also known as cervical dysplasia, is the premalignant transformation and abnormal growth of squamous cells on the surface of the cervix. It is graded according to its pathological process seen on the biopsy specimen; from CIN1 to CIN3. This represents depth of disease found on biopsy from CIN 1 (1/3 of the cervical specimen shows dysplasia) to CIN 3 (which indicates that the dysplasia is found throughout the cervical biopsy specimen of the transformation zone).

LLETZ (large loop excision of the transformation zone), is an outpatient surgical procedure recommended for managing CIN2 and CIN3. In women with HIV, untreated CIN1 is likely to persist, and the likelihood of persistence is also higher than among HIV-seronegative women; therefore, screening and follow-up of these patients is very important.[14]

Alternative modalities for cervical cancer screening include visual techniques (visual inspection with acetic acid and visual inspection with Lugol's iodine) and molecular tests. HPV DNA PCR, a molecular test, is a promising new strategy for primary cervical cancer screening and/or triage of abnormal Pap smear results.

The so-called "HPV test-and-treat" strategy has been evaluated in randomised controlled trials, including in South Africa[15] and in HIV-seropositive women.[16] These trials have shown the strategy to be effective at preventing HSIL. New point-of-care platforms for HPV DNA PCR testing, such as the GeneXpert System (Cepheid, Sunnyvale, CA),[17] hold great promise for future HPV test-and-treat programmes across sub-Saharan Africa.

In summary, cervical cancer is a preventable disease which is curable if detected and treated in its precancerous state. No woman should get cervical cancer. If more clinics with dedicated staff can have access to cervical cancer screening, then every woman would live a life free from cervical cancer.

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Figure 3: Colposcope.

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Self-management for adults living with HIV

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> There are three main components or domains of self-management: medical management, role management/social participation and emotional/identity management.

Introduction

The World Health Organization (WHO) defines health as a complete state of physical, social and mental well-being.[1] However, this definition may not be relevant given the current global chronic disease epidemics. Huber *et al*.[2] argue that health should rather be defined as a person's ability to adapt and self-manage several physical, social and psychological challenges. Self-management has therefore become a critical component in the care of patients living with chronic diseases. With the increase in access to antiretroviral treatment (ART), HIV is now regarded as a chronic disease and care models that support this should be implemented.

Definition of self-management

Self-management focuses on the interactions, processes and day-to-day behaviours in which people engage to manage a chronic condition, in complementary partnerships with health care providers and family members.[3,4] The concept is different from the term 'adherence', since adherence focuses on the extent to which a patient's behaviour coincides with recommended treatment plans. Self-management implies that the primary responsibility for care is transferred to the patient and it therefore requires a patient- and family-centered approach to care.[5] According to Ryan and Sawin,[5] self-management refers to the use of self-regulation skills and involves activities such as goal-setting, self-monitoring and health behaviour change. Proponents of self-management acknowledge that the patient is the one who, on a daily basis, decides what they are going to eat, what behaviour they will engage in and whether they will take their prescribed treatment. Consequently, these activities or behaviours can either positively or negatively affect their health.[6]

Why is it important to support patients to self-manage?

South Africa currently has approximately 2.6 million people on lifelong antiretroviral therapy (ART).[7] With the increase in the number of patients accessing services, amid pervasive human resource constraints, patients need progressively to become more responsible for their own care. This is supported by the WHO guidelines on task-shifting for HIV care, which acknowledge the patient as one of the key role players in task-shifting. Patients living with HIV are the final tier in the task-shifting continuum.[8] In many settings, HIV support groups or adherence clubs have already been implemented.[9] This means that patients only access health services to get their treatment on a 2 - 3-monthly basis and are only reviewed 6-monthly or annually by a doctor or a nurse.[10] The Department of Health has also adopted the strategy to, in the long term, keep 90% of patients on ART in care and virologically suppressed.[7] Patients therefore need to be supported to manage their own chronic disease. If patients can self-manage well, it will ultimately increase the cost-effectiveness of ART programmes.

A systematic review on HIV self-management education programmes found that these programmes improve the physical, psychological and behavioural outcomes of patients.[11] People living with HIV are now living longer and are consequently increasingly being diagnosed with other chronic diseases such as diabetes or hypertension.[12] Supporting the self-management skills of patients living with HIV may therefore be key to achieving the aims of ART and other chronic disease programmes.

Components of HIV self-management

There are three main components or domains of self-management: medical management, role management/social participation and emotional/identity management.[13] These components are applied in the context of HIV management and briefly summarised in Table 1.

Traditional versus self-management education

Self-management support is not the same as providing patient education. Traditional education focuses on providing disease-specific education, whereas self-management education or support seeks to provide patients with skills such as problem-solving and personal reflection.[6] In traditional health education, the aim is to educate patients so that they can adhere to treatment plans. When providing self-management support, the patient formulates the problem and the health care provider assists the patient to

Table 1: Components of HIV self-management[4,13,14]

Medical management	**Role management/social participation**	**Emotional/identity management**
Disease-specific: • Knowledge and understanding about HIV, treatment and side-effects • Integrating taking treatment into daily routines • Evaluating symptoms and side-effects • Self-monitoring outcomes (e.g. CD4, viral load) General: • Accessing health care – attending appointments • Communicating with health care provider (e.g. tell the doctor or nurse about symptoms) • Minimising risk behaviour (e.g. unprotected sex, alcohol use) • Engaging in healthy behaviour (e.g. healthy diet and exercise)	• Building social networks (e.g. family, church, support group) • Participating in normal social activities • Setting goals and dreams for the future related to family and work • Negotiating disclosure to significant others, including trusted family members, friends and sexual partners • Engaging in and managing romantic relationships • Communication with family and friends and problem-solving • Educating others about HIV	• Maintaining a positive body image • Sharing feelings and experiences (engaging with others e.g. in the family or in a support group) • Managing emotions (e.g. frustration, fear, isolation) and stress in a positive way • Accepting HIV as a chronic disease • Using spirituality or religion as a motivator to stay healthy • Developing and adhering to a set of values coherent with personal, group and societal norms

> HIV is recognised as a chronic illness. This has implications for the management of patients.

improve their self-efficacy in managing their own health.

How can we support patients to self-manage?

Self-management interventions encourage the acquisition of self-management skills. Although several self-management programmes for patients living with HIV have been implemented, more research is needed in the African context. Programmes should also shift away from health-worker-led to patient-led interventions for self-management.[15]

Self-management support can occur through social media or group education programmess based at facilities or in the community. It can also be promoted through individual and group activities in the context of HIV and chronic care to help people living with HIV to understand their rights and responsibilities. Such strategies may stimulate meaningful engagement of people living with HIV and their families, communities and health workers, in order to improve care and services for people living with HIV.

Ways in which patients can be supported to improve their self-management include:

- Understanding the health beliefs and values of patients
- Normalising HIV
- Empowering patients to be aware of and self-monitor their outcomes such as CD4 counts and viral loads
- Encouraging patients to ask questions and/or seek meaningful answers about HIV and their treatment
- Promoting shared decision-making
- Helping patients to set and monitor their own goals in terms of their health, family and work
- Fostering dreams about the future and negating fears and uncertainties
- Motivating patients to engage in normal social activities
- Increasing their self-confidence and self-worth
- Urging patients to share their HIV status and feelings with trusted family members, friends or sexual partners.

Conclusion

HIV is recognised as a chronic illness, and this has implications for the management of patients. In countries such as South Africa, with a high burden of disease and limited resources, encouraging patient self-management may relieve the burden on health care facilities and staff. This may enable patients to respond adequately to predictable everyday challenges such as HIV-related stigma, and sustain behaviours and routines required for optimal viral suppression and well-being. In order to amply support patients to improve their self-management skills, health workers need to follow a patient-centered approach to care.

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Difficult decisions – A personal account of taking PEP in pregnancy

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Making the decision to start and then complete a course of post-exposure prophylaxis (PEP) while pregnant is difficult. Although factors such as how far you are in your pregnancy, how qualified or experienced you are in HIV treatment, or how good your support systems are make a difference, it is difficult. In my case I had, like many women, struggled with nausea in the first trimester. I was in my second trimester when I had my exposure. It happened on the last Friday of April in 2012. At this time I was working at a large HIV clinic every day, and was becoming an experienced HIV clinician.

The exposure

My call in the emergency department was almost finished and I was asked by one of the interns I was supervising to help hold a patient who needed suturing. *Lesson: it always happens at the end of shifts, on busy weekends, when it is very inconvenient.* The patient had been stabbed in the back and had had a few too many drinks. As the intern was suturing her back, she moved suddenly, and fresh blood landed on my face and in my eye. Lesson: always use appropriate personal protective equipment. I washed out my eye, but I was in two minds about starting PEP – it was low risk after all wasn't it? I did find out from the patient and her records that she had failed first-line antiretroviral treatment (ART) and had been changed to second-line treatment, but her most recent viral load was over a million copies. I did not even consider syphilis, hepatitis and other blood-borne diseases, because when it comes to our own health we often lose the ability to be objective health care workers. I definitely did. *Lesson: it does not matter how experienced or knowledgeable the person is, get another senior/experienced opinion.* I did not discuss it with the senior on call, as is the case with most junior doctors in public hospitals where splashes happen frequently, and went home for the rest of the weekend.

The what-ifs

That weekend I ran through every scenario in my head – was it too late to start PEP? What if I seroconverted and my baby did too? What I did not mention, is that a few months before the splash I had had laser surgery to both eyes to correct my vision, which left my eyes raw and vulnerable to infection, but I was not sure for how long. Mix that in with the immunosuppression of pregnancy and I was becoming a bit nervous that "just a splash" may be more in my case. We know academically that the risk of serious side-effects can outweigh the relatively small risk of seroconversion, especially in so-called low-risk exposures, and that in the very unlikely case of seroconversion, HIV is treated very successfully. But how you see the risk/benefit ratio, and how you feel about it are two quite different things.

Two, or three, brains are better than one

On Monday morning I went back to work and decided to get some more opinions. The head of the emergency department advised me to go on PEP, and to take tenofovir (TDF)/emtricitabine (FTC)/atazanavir/ritonavir(ATV/r), as ATV/r is better tolerated than Aluvia. She had just heard of ATV/r, but did not know if it was safe in pregnancy, nor if it was available to me. I wasn't sure either.

I then called 'a friend of a friend' who is a well-known and well-respected senior clinician in the HIV world. She advised me to start on tenofovir/emtricitabine (Truvada) and lopinavir/ritonavir (Aluvia) as soon as possible as I was still within the 72-hour window. Her impression at the time (2012 is some time ago considering how fast knowledge changes in HIV) was that Aluvia was very robust and a better option, so one hour later the first dose was in my system.

And then?

Once the decision to start PEP had been made, I vowed to complete the month-long course. I was to start in a new department renowned for its exceptional workload that week, with my first overnight call the next day. My husband was in India for work for 10 days, and I had a bleed indicating a threatening miscarriage – the stress was definitely getting to me! I was constantly nauseous with profuse diarrhoea, and I was worried about my child. *Lesson: follow-up with a professional for side-effect prophylaxis and management!* I cannot stress enough how much this would have helped me – completing the course is important, and patient support and treatment adjustment is probably more important than choosing a PEP regimen. I had convinced myself that the protease inhibitor was the single most important medication to stop seroconversion, and pushed through a month of awful side-effects. In truth, we don't know if three drugs are better than two, or even if two are better than one. What should have happened in my case is that Aluvia should have been substituted or dropped entirely.

At the end of it all, I completed the month of Truvada and Aluvia, I didn't pick up any weird or wonderful infections, the bleeding stopped, and my daughter was born at term. She was small and had some intrauterine growth restriction, but I am sure that was more due to my stress levels during the pregnancy than due to any side-effects from the PEP.

What I learnt

What taking a month of PEP did teach me, is that the side-effects from Aluvia can be really horrendous. It has prepared me to better counsel my patients, and to believe them when they say it is intolerable. I also understand why most people who start PEP do not finish it, which is why we need to prioritise better side-effect prophylaxis and management. It has also made me advise every colleague that has had a significant exposure to fork out the money for raltegravir as the third medication.

What would I do if I had another exposure in pregnancy? There are very limited data concerning raltegravir or dolutegravir in pregnancy, although there is a phase 2 trial ongoing in South America comparing raltegravir to Aluvia in PMTCT,[1] and other trials are being planned at the moment. Both Aluvia and raltegravir are categorised as FDA "C" medications (i.e. animal reproduction studies have shown an adverse effect on the foetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks).[2] The latest South African HIV Clinician's Society PEP guidelines advise the use of atazanavir/ritonavir until more is known about the safety of the integrase inhibitors in pregnancy. Until then, please be careful fellow health care workers!

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1. https://clinicaltrials.gov/show/NCT01854762
2. http://www.drugs.com/pregnancy-categories.html

STOP STOCKOUTS

What is the Stop Stock Outs Project?

The Stop Stock Outs Project (SSP) is an organisation that monitors availability of essential medicines in government clinics and hospitals across South Africa. The SSP aims to assist healthcare workers in resolving stock outs and shortages of essential medicines at their facilities, enabling them to provide patients with the treatment they need.

How do you report a stock out to the SSP?

Our hotline number is
084 855 7867

- **Send us a Please Call Me**
- **Send us an SMS**
- **Phone us or missed call us**

We will then phone you back to get some more information.

You can also email us at
report@stockouts.co.za

What information do you need to report to the SSP?

The name of the medicine that is out of stock

The name of the clinic or hospital where you work

Reporting is an anonymous process and your name, if provided, will not be disclosed to anyone outside of the SSP.

MEDECINS SANS FRONTIERES
SOUTHERN AFRICAN HIV CLINICIANS SOCIETY
SECTION27 catalysts for social justice
RuDASA
TAC TREATMENT ACTION CAMPAIGN
Rural Health Advocacy Project

Working smarter rather than harder

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Background

In December 2013, UNAIDS released its strategy for ending the AIDS epidemic by 2030 which included 90-90-90 targets. This has inspired the 90-90-90 strategy to be adopted by the South African National Department of Health, with the aims of ensuring that: **90% of all people living with HIV know their status; 90% of those who test HIV-positive will receive ART; and 90% of those on ART will be virally suppressed**.[1]

HIV counselling and testing (HCT) is the crucial first step of the HIV care continuum which will ultimately lead to viral load suppression. Significant efforts and resources have been spent over the past two decades in raising awareness about HIV and providing essential medical interventions, such as access to expanded testing services and provision of ART. Despite these efforts, recent evidence reveals that only **45% of people living with HIV in sub-Saharan Africa know their HIV status**.[2]

The overarching goals of HIV testing services are to:[3]

- identify people with HIV through the provision of quality services for individuals, couples and families;
- effectively link individuals and their families to appropriate HIV treatment, care and support, as well as HIV-prevention services, based upon their status; and
- support the scale-up of high-impact interventions to reduce HIV transmission and HIV-related morbidity and mortality – that is: antiretroviral therapy (ART), voluntary medical male circumcision (VMMC), prevention of mother-to-child transmission (PMTCT), pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

In support of the first 90% goal (90% of all people living with HIV know their status), the Ekurhuleni North Department of Health, in partnership with the Aurum Institute Quality Improvement (QI) department, conducted a Root Cause Analysis in 14 primary health clinics. The goal was to **determine why routine programme implementation of HCT was not yielding the required results.** The process revealed useful insights regarding the challenges experienced in the delivery of the HCT service:

1. **Most counsellors had an incorrect perception of their targets and how they are calculated.** Within the counsellors' network, there was a common understanding that each counsellor had to test at least six clients per day. This perception did not take into consideration the population size or the number of counsellors based at

Table 1: Catchment population target versus arbitrary daily testing target

	Target based on catchment population	**Arbitrary daily testing target**
Population	51 677	51 677
Annual	16 485	16 485
Monthly	1 374	480
Weekly	343	120
Number of counsellors	4	4
Daily per counsellor	17	6

that facility. It is not clearly understood where this perception on the targets originated. This affected the target for the annual HIV testing coverage rate and further impacted the monthly target. Therefore, it is essential that **targets are based on the target population and not on an arbitrary daily testing target.** The table above provides an example of how to calculate your facility's target using **population figures and counsellor headcount** as compared to arbitrary daily testing targets. As it is vital to correctly calculate these targets, we have provided a step-by-step guide to assist this process (Figure 1). Many counsellors were actually underreporting their efforts. This was as a result of not understanding the definition of the indicator as defined in the District Health Information System (DHIS). The HIV testing coverage indicator includes all patients tested between the ages of 15 and 49 **as well as** all ANC clients and HIV-tested clients aged 50 years and above. Most counsellors were not including the ANC clients in their monthly reporting.

2. There were **missed opportunities to offer HIV testing services at facility level.** HIV testing services are not well integrated within the clinic system. The HCT service at the clinic is viewed as a separate stream supporting the clinical services and, in some facilities, the service is rendered at a separate building outside the main clinic. Due to this lack of integration and linking of services, the clinic system is not taking advantage of the many opportunities that clients could have to access HCT services within the clinic, i.e. if a patient is identified by a nurse as needing an HIV test, often the nurse refers the patient to a counsellor. This requires the patient to stand in yet another queue and will most likely increase the waiting time. This often results in patients leaving the facility without accessing an HIV test.

Numerator

- HIV clients tested: 15 - 49
- HIV clients tested: 50 and above
- ANC first visit test
- ANC re-test

Denominator

Catchment population

3. There is minimal targeted HIV education with reliance on a **passive approach to offering HCT services** within the facilities. The counsellors wait for patients to volunteer for HCT at the clinic, instead of actively and strategically recruiting them.
4. The counsellors were **unaware of the interdependence of their efforts and how it impacted on the facilities' systems and the clinics' performance.** They were working as individuals and not as a team of health workers who are supporting and contributing to the entire HIV care continuum.

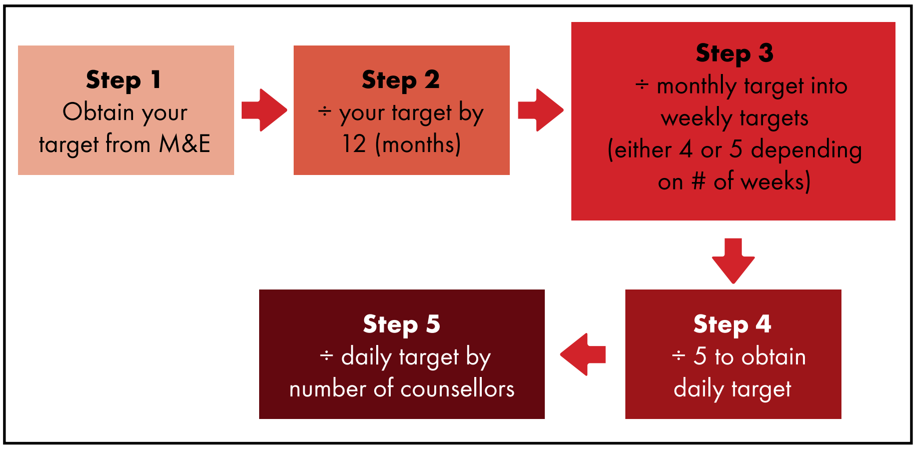


Figure 1: Step-by-step guide to calculating targets using population figures and counsellor headcounts.

Intervention

Following a root cause analysis to identify why targets were not being met, the DoH and Aurum Institute decided to draw on the **benefits of peer learning by enabling the facilities to work together using Quality Improvement (QI) methodology** to test possible ideas that could lead to an improvement in the HCT coverage rate.

The counsellors became the initial focus of the intervention as facility HCT targets are delineated by an 80/20 split: a target of 80% is to be met by counsellors and 20% by nurses.

A **9-month learning collaborative** was initiated with the counsellors as they would be better equipped to understand the multifaceted challenges faced by the facilities when providing HCT. The collaboratives' objective was to provide counsellors with a comfortable platform to create dialogue, share experiences, knowledge, misconceptions and ideas as peers with supportive supervision by their mentors, managers and QI staff. Through peer learning, the counsellors were able to innovate and work collaboratively to improve the accessibility of HCT services.

> The true strength in a classroom lies in the collaboration of learners not in the knowledge of experts – Unknown

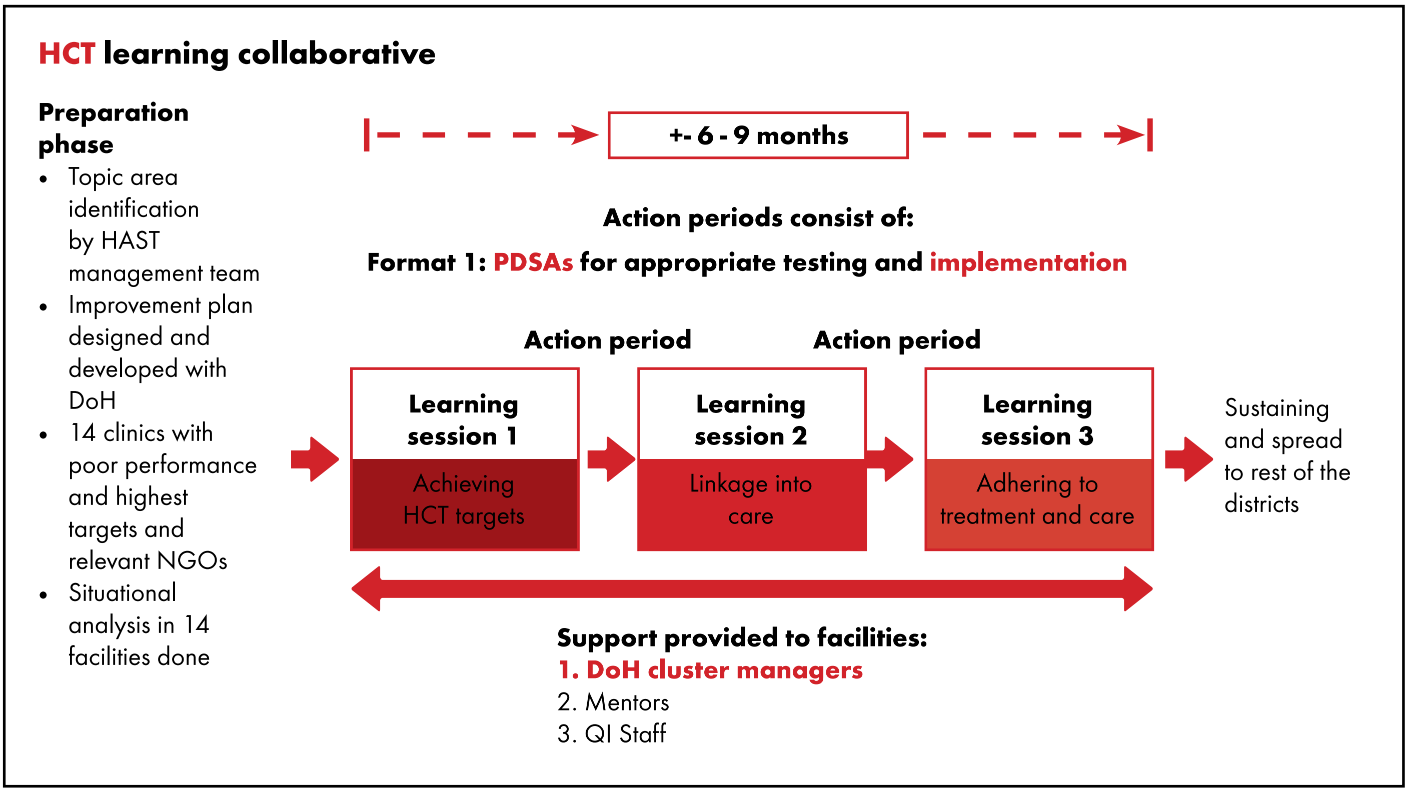


Figure 2: HCT learning collaborative.

The learning collaborative was designed to address the problem areas identified during the root cause analysis. The problems were converted into topic areas for improvement with which counsellors engaged using QI methodology and tools. Bi-weekly supportive site visits were conducted by the HCT mentors and a QI staff member. Additionally, peer reviews were conducted on a monthly basis which helped to keep the enthusiasm and commitment high. **Peer learning was consistently emphasised and strengthened to become the backbone of the entire process.** Through this engagement, change ideas were created and tested, monitored and evaluated. These change ideas were shared across the 14 facilities and are currently intended to be spread throughout the district. The diagram below (Figure 2) provides an outline of the collaborative strategy employed.

The peer-learning process exposed the counsellors to the benefit of explaining ideas to others, receiving constructive feedback, asking clarity-seeking questions and exercising a practical learning approach. It was inspiring to witness counsellors growing in confidence and developing a sense of responsibility by approaching their work as a team. They now understood their key deliverables and how their performance contributed to the greater facility system, and ultimately, to the larger scope of the 90-90-90 goals. This fertile environment has led to the discovery of many innovative ways to improve the HCT services in their facilities.

Results

During the learning sessions, counsellors were taught practically about data, indicator definitions, how to calculate and set realistic daily targets in relation to their annual target and facility capacity, and how to monitor their data monthly on a run chart. Through this, **counsellors saw the need to adapt the monthly run chart to a weekly one. They identified that it would be easier to monitor their performance in order to project proactively whether they would be on track to reach their monthly targets.**

Furthermore, the weekly monitoring motivated the team of counsellors to have **weekly meetings** to review their interventions and performance. This practice has become a standard practice in all the 14 participating facilities in the learning collaborative. The counsellors have begun **engaging with and utilising their data to make decisions as a team.**

> Tell me I will forget,
> teach me I will
> remember, involve me
> I will learn
> – Benjamin Franklin

Some of the incredible ideas that have originated from the collaborative are:

- A standard tool for reporting the key data elements to DHIS. **A standardised reporting tool was developed by management to improve the data verification and reporting process on a monthly basis.** This tool enabled counsellors to collate their numbers from the HCT register (source document), verify the data elements and total them: e.g. ANC clients first test, ANC clients re-tested, females tested, males tested, PICTs done, etc. The form was then handed over to the data capturer at the end of every month. This process has ensured that all HIV testing done is in one source document, that it is verified and hand-offs are reduced.

- Health talks with encouraging messaging on the benefits of testing for HIV are **consistently done throughout the day** and not just in the morning. Counsellors realised the importance of actively ensuring that patients who come into the facilities at various times are exposed to a health talk. Therefore, the change idea to do **health talks three times a day catering for morning, afternoon and late afternoon patients** was shared and implemented.

- Facilities that were challenged with a lack of physical counsellor-friendly space to provide HCT services, benchmarked from the collaborating NGOs in the communities who **utilise gazebos to create a more confidential space in which to offer HIV testing.**

- Counsellors discussed how to facilitate the integration of their services with the clinical streams. They came up with change ideas to **place a counsellor in the nurses' consultation room.** This was done to ensure that a greater population of clients utilising the services in the facility would have the opportunity to access HCT services. Furthermore, counsellors were requested to give **feedback on the HCT service during staff meetings** to ensure that integration is inculcated into staff thinking and implementation.

- Having an understanding that they are measured against their catchment population and that their role is to identify hard-to-find populations who do not know their status, has motivated counsellors to **open HCT services during weekends.** In addition to this, counsellors have committed to **testing outside of the clinic gates** in order to access clients who do not frequent the clinic or prefer to test away from the clinic for fear of waiting times.

- The counsellors have formed, and participate in, a **WhatsApp group** to strengthen the peer learning and expand the sharing platform. This group enables them to share their experiences and challenges, and receive real-time emotional support or advice. The WhatsApp group is administered by their HCT DoH mentor who requests bi-weekly updates. These updates have fostered a fun, healthy competitive environment that is beneficial for their motivation, teamwork and positive spirit.

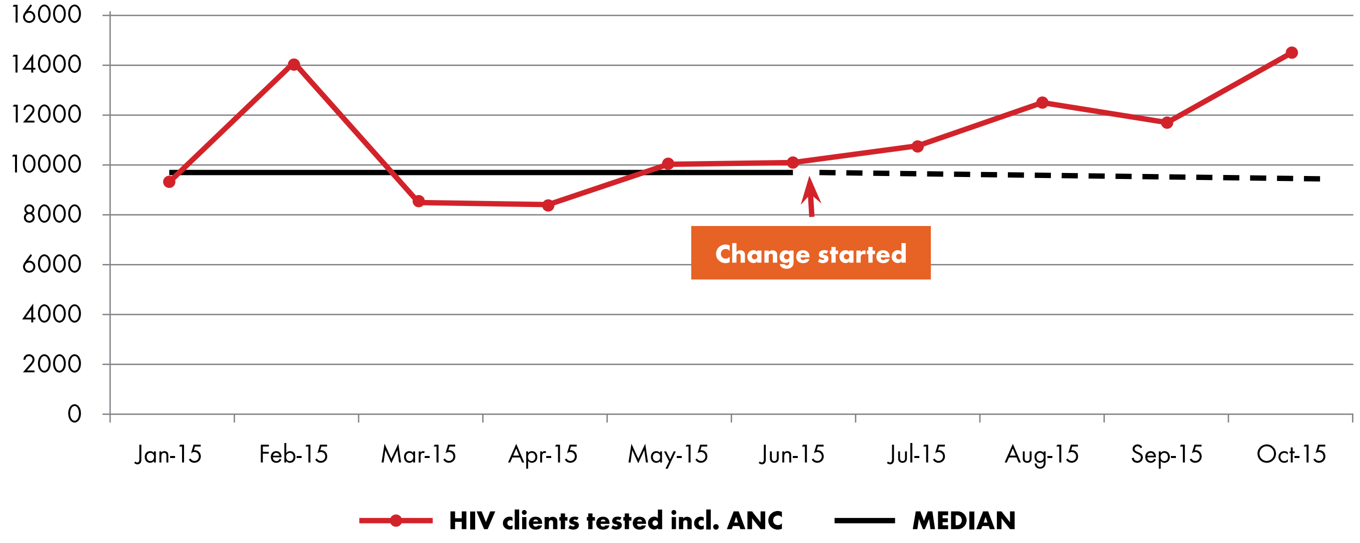
Below is an easy reference guide summarising all the interventions tried and tested to improve HCT services.
Please steal shamelessly!

Table 2: HCT change ideas tested during the collaborative process

Identified problem via root cause analysis	Change idea	Positive impact
Poor understanding of indicators and data elements resulted in poor strategy, data collection, data flow and under-reporting	Give counsellors and nurses monthly and weekly targets and monitor them using run charts	Counsellors understand who they should test and begin to report correctly on all data elements Fosters a healthy competition among counsellors which leads to an improvement in performance and creativity
Nurses have no way of monitoring the testing that they have done in their consultation rooms	Each nurse is given a target of 2 PICT per day. Each morning, the counsellors give the nurses 2 test kits and consent forms and collect them at the end of each day.	Increases support for the nurse who may be overwhelmed to plan for HIV testing; reminds them to test and to record their efforts
Poor demand generation targeting their population No innovation in the methods of communicating HCT messages Not fully utilising resources	Rotation of counsellors to give health talks throughout the day (morning, mid-morning, lunch) Distribute relevant IEC materials during health talks Send a counsellor with the mobile clinic every day	Understand that counsellors, health promoters and nurses need to reach out to the population to promote healthy behaviour and encourage HIV testing
Poor integration of services which resulted in clients being missed	Pairing a counsellor and consultation room to cover all services Utilise group pre-counselling sessions All new patients identified at reception to be told to start with HCT first	Every patient regardless of presenting condition is given an opportunity to test Patient waiting time is reduced Strengthened teamwork among all facility staff in ensuring population is tested
Lack of adequate infrastructure for performing confidential counselling and testing	Use gazebos as HCT rooms for facilities with no space Make use of empty rooms in facilities as counselling rooms	Counsellors are using their time more effectively as they are not taking turns to use the room; therefore HCT numbers improve Greater job satisfaction as now time is utilised effectively
No innovation in targeting the population who do not utilise PHC services regularly and are therefore not testing regularly	Bi- weekly or monthly campaigns outside the facility every month Offer HCT service during weekends	Increased chances of identifying the key populations who may be hard to reach e.g. more males, sex workers, mobile populations etc.

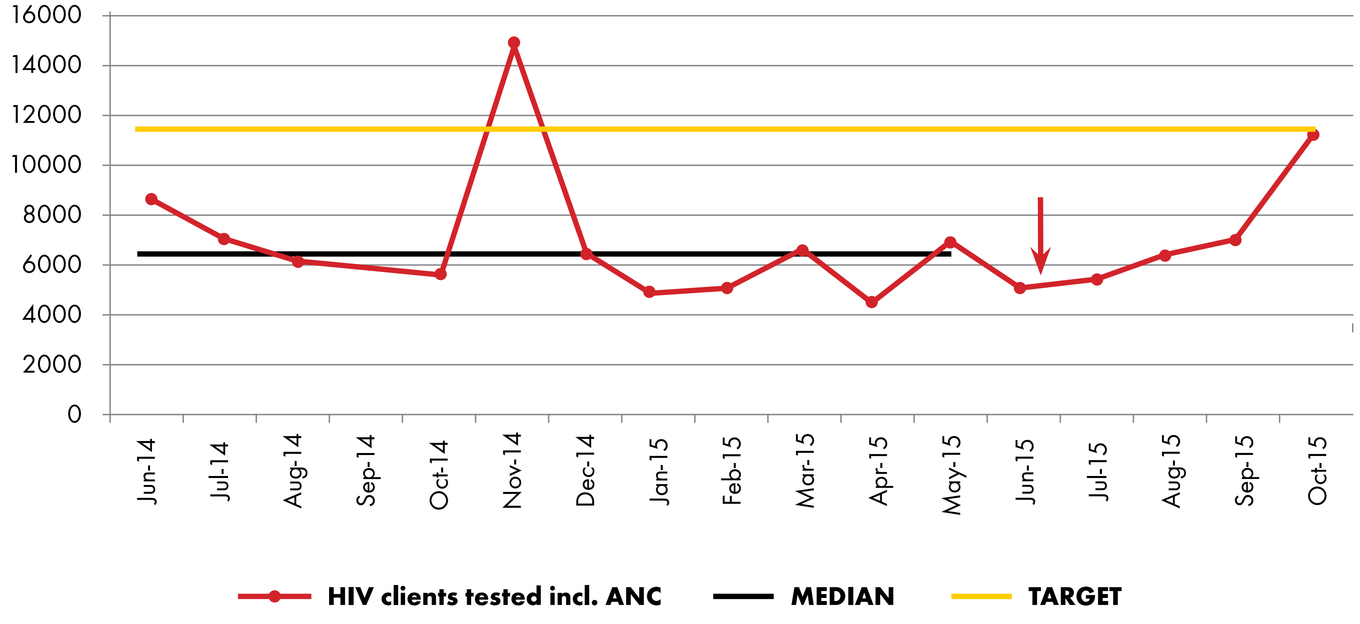
The line graphs below indicate some of our initial high-impact findings. Additional data points are still required to declare with authority that a systems change has taken place.

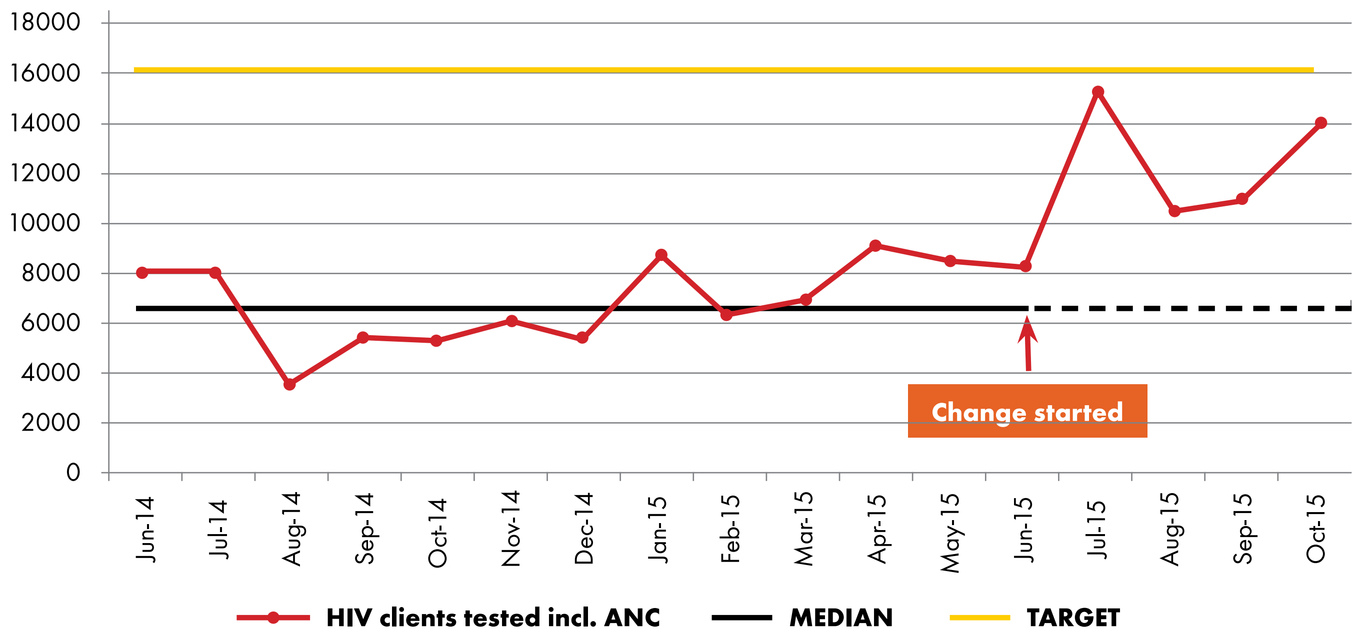
14 facilities in collaborative – HIV clients tested incl. ANC



Facility A: **1. Placing a counsellor in a consultation room with PHC nurse**

2. Offering HCT services during weekend





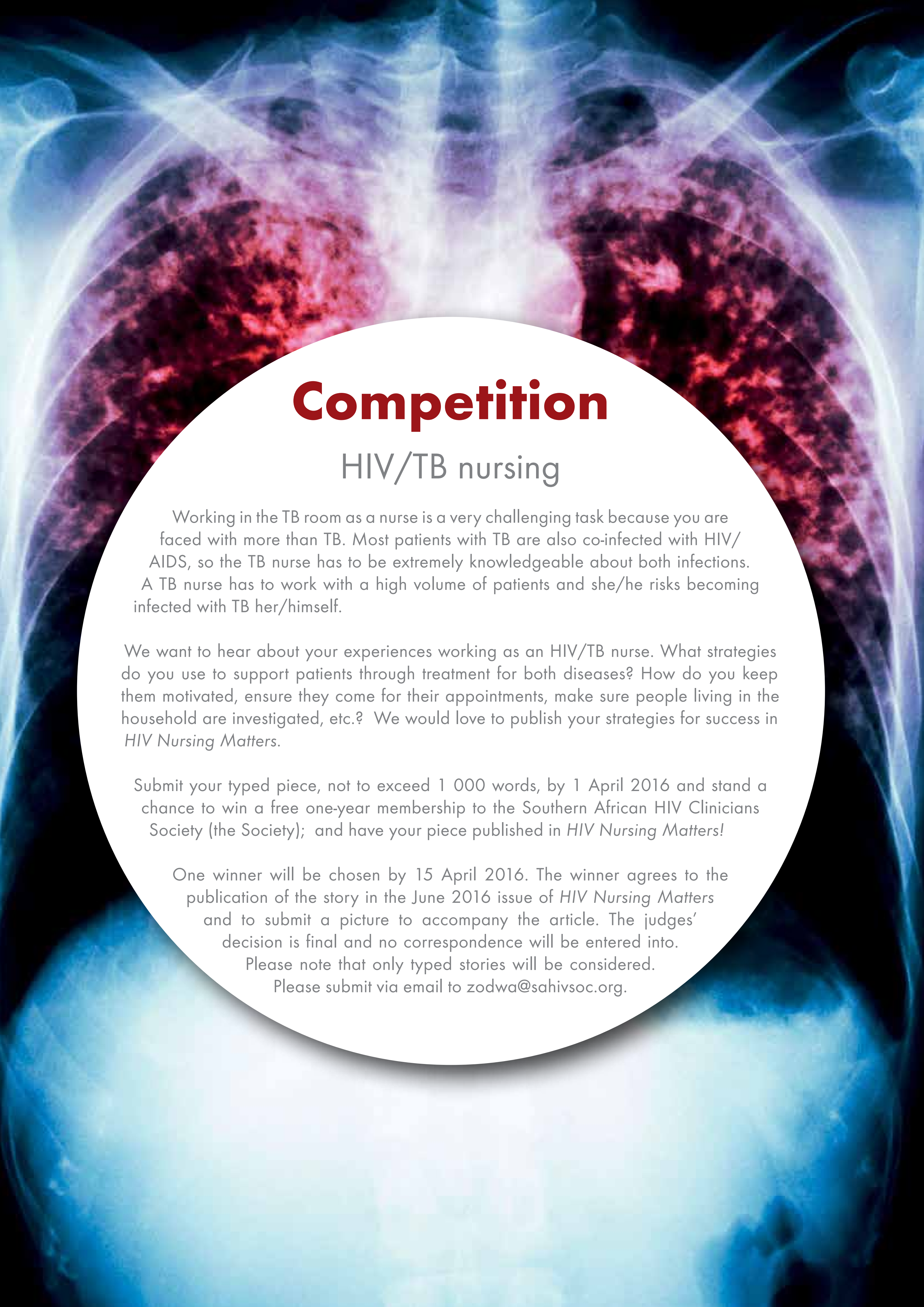
Facility B: 1. Extended health talks throughout the day and targeting breastfeeding mothers at 6-day and 6-week visit and family planning clients

Conclusion

Change only takes place when a concerted effort is made to try to understand the reasons why targets are not being met and by actively addressing those causes by testing ideas to determine their impact. A systematic quality improvement approach to addressing the gaps in the HCT programme has provided insight into an often confusing and neglected programme. The results have shown that peer learning generates innovation, excitement and commitment. Very importantly, it highlights that there truly is abundance in our facilities, of which we are not taking advantage. If we are to meet the 90-90-90 UNAIDS goals, we can and must work smarter!

References:

1. UNAIDS 2014
2. 90-90-90 An Ambitious Treatment Target To Help End AIDS Epidemic UNAIDS 2014
3. World Health Organization. CONSOLIDATED GUIDELINES ON HIV TESTING SERVICES. Geneva, JULY 2015



Competition

HIV/TB nursing

Working in the TB room as a nurse is a very challenging task because you are faced with more than TB. Most patients with TB are also co-infected with HIV/AIDS, so the TB nurse has to be extremely knowledgeable about both infections. A TB nurse has to work with a high volume of patients and she/he risks becoming infected with TB her/himself.

We want to hear about your experiences working as an HIV/TB nurse. What strategies do you use to support patients through treatment for both diseases? How do you keep them motivated, ensure they come for their appointments, make sure people living in the household are investigated, etc.? We would love to publish your strategies for success in *HIV Nursing Matters.*

Submit your typed piece, not to exceed 1 000 words, by 1 April 2016 and stand a chance to win a free one-year membership to the Southern African HIV Clinicians Society (the Society); and have your piece published in *HIV Nursing Matters!*

One winner will be chosen by 15 April 2016. The winner agrees to the publication of the story in the June 2016 issue of *HIV Nursing Matters* and to submit a picture to accompany the article. The judges' decision is final and no correspondence will be entered into.
Please note that only typed stories will be considered.
Please submit via email to zodwa@sahivsoc.org.

NATIONAL HEALTH LABORATORY SERVICE

RESULTS HOTLINE

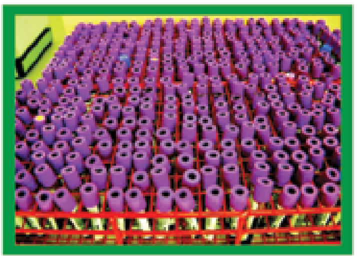
0860 RESULT 737858

This line is dedicated to providing results nationally for HIV Viral Load, HIV DNA PCR and CD4 to Doctors and Medical Practitioners, improving efficiency in implementing ARV Treatment to HIV infected people. This service is currently available to members of Health Professionals Council of the South Africa and the South African Nursing Council. The hotline is available during office hours from 8am to 5pm Monday to Friday.

Register to use the RESULT HOTLINE

Follow this simple Step-by-step registration process

Dial the HOTLINE number 0860 RESULT (737858)
Follow the voice prompts and select option 1 to register to use the hotline
A hotline registration form will be sent to you by fax or e-mail.
Complete the form and return it by fax or e-mail to the hotline to complete your registration process.
Once you are registered, you will be contacted with your unique number. This number is a security measure to ensure that the results are provided to an authorized user.



To use the hotline dial 0860 RESULT (737858)

Select option 2 to access laboratory results.

☐ You will be asked for your HPCSA or SANC number by the operator.
☐ You will be asked for your Unique Number.
☐ Please quote the CCMT ARV request form tracking number (bar coded) and confirm that the result requested is for the correct patient.

Should the results not be available when you call, you will be provided with a query reference number which must be used when you follow up at a later date to obtain the result.

Once you have a Reference number

Select option 3 to follow up on a reference number
Should the requested results not be available, a query reference number will be provided to you.
A hotline operator will call you within 48 hours of receiving the laboratory results.

Registering for this service from the NHLS, will assit in improving efficiency, providing improved patient care and streamlining clinic processes. Call now and register to access results for HIV Viral Load, HIV DNA PCR and CD4.

Quiz questions for March 2016

1. True or False: People living with HIV have a higher risk of experiencing mental health problems, and people with mental health problems are at a greater risk of acquiring HIV infection?

Answer..

2. Which two types of antidepressants are known to be safer to take during pregnancy?

Answer..

3. Which antidepressant is the drug of choice for a patient receiving ART?

Answer..

4. Among other cancers in Africa, what percentage is attributed to cervical cancer in women?

Answer..

5. True or False: Invasive cervical cancer develops relatively slowly, typically over a period of at least 10 years?

Answer..

6. Is it necessary to remove the discharge and blood on the cervix before doing a Pap smear?

Answer..

7. True or False: It is necessary for a newly diagnosed HIV-positive woman to do a baseline Pap smear?

Answer..

8. Can someone who is HIV-negative and pregnant take post-exposure prophylaxis (PEP) after accidentally exposing herself to the virus?

Answer..

9. Define “self-management”.

Answer..

10. Name three main components or domains of self-management.

Answer..

Quiz answers from the September 2015 issue

1. **Up to 120 days**
2. **Individuals who have been confirmed to be illegal foreigners**
3. **True**
4. **Tenofovir and Emtricitabine**
5. **True**
6. **Gardasil**
7. **2008**
8. **18 - 24-year-olds**
9. **Botswana, Namibia and Zimbabwe**
10. **More than 27 678 people**

NDoH/SANAC Nerve Centre Hotlines

Any HCT concerns from facility and district managers should be reported to the NDoH/SANAC

Nerve Centre Hotline and specific emails for each province:

- **Western Cape:** 012-395 9081
  sanacwesterncape@gmail.com
- **Northern Cape:** 012-395 9090
  sanacnortherncape@gmail.com
- **Eastern Cape:** 012-395 9079
  sanaceasterncape@gmail.com
- **KZN:** 012-395 9089
  sanackzn@gmail.com
- **Free State:** 012-395 9079
  sanacfreestate@gmail.com
- **Mpumalanga:** 012-395 9087
  sanacmpumalanga@gmail.com
- **Gauteng:** 012-395 9078
  sanacgauteng@gmail.com
- **Limpopo:** 012-395 9090
  sanaclimpopo@gmail.com
- **North West:** 012-395 9088
  sanacnorthwest@gmail.com

AIDS Helpline
0800 012 322

The National Toll-free AIDS Helpline was initiated in 1991 by the then National Department of Health's (NDoH's) "HIV/AIDS, STDs and TB Directorate". The objective of the Line is to provide a national, anonymous, confidential and accessible information, counselling and referral telephone service for those infected and affected by HIV and AIDS, in South Africa.

In 1992, LifeLine was requested by NDoH, to take over the management of the Line by rotating it between the 32 existing community-based LifeLine Centres, and manning it with volunteer counsellors. In 2000, in response to an increasing call rate, a centralised Counselling Centre was established in Braamfontein, Johannesburg, to house the AIDS Helpline.

The AIDS Helpline a national toll-free service, operates on a 24/7 basis and is utilised by people from all walks of life in urban and rural areas, in all 11 languages at no cost from a landline telephone.

Annually, the Line provides anonymous, confidential and accessible telephonic information, counselling and referrals to over 300 000 callers.

The AIDS Helpline plays a central role in providing a deeper preventive and more supportive service to those infected and affected by HIV/AIDS, but also serving as an entry point in terms of accessing services from government, private sector and other NGOs/CBOs.

Cases presented range from testing, treatment, transmission, TB, medical male circumcision, etc.

The AIDS Helpline incorporates the Treatment Line. The treatment support services were included to complement the services provided by lay counsellors on the line. The Treatment Line is manned by nurses who provide quality, accurate, and anonymous telephone information and/or education on antiretroviral, TB and STI treatment.

If you have any HIV/TB clinical questions, send them to "Ask the clinician" via zodwa@sahivsoc.org and you will get an answer in the next issue of *HIV Nursing Matters*. If your question is urgent, then please state so on your email and the answer will be emailed back to you and still be published in the magazine.

Dear clinician

I read in the September 2015 issue that PrEP was very effective in a study of men who have sex with men (MSM). Can this approach be scaled up to other at-risk populations?

Dear nurse clinician

Unfortunately, PrEP is not included in our National South African ART guidelines yet, which means it isn't available at our public health care facilities; however the National Department of Health is busy developing PrEP guidelines and will be starting a rollout for sex workers in June 2016. The revision to the Southern African HIV Clinicians Society PrEP guidelines were published early March 2016 which means clients who feel that they are at risk of being infected with HIV, can access PrEP privately. PrEP is likely to be rolled out over the next few years to all South Africans who consider themselves to be at high risk of contracting HIV.

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Professor Yunus Moosa (2016 Conference Chair)

"This conference really is the place to be for any self-confessed HIV clinician – the field moves so fast, and so differently in different parts of the world…this is the most efficient and entertaining way to find out what and who is important in our region."

Professor Francois Venter (2014 Conference Chair)

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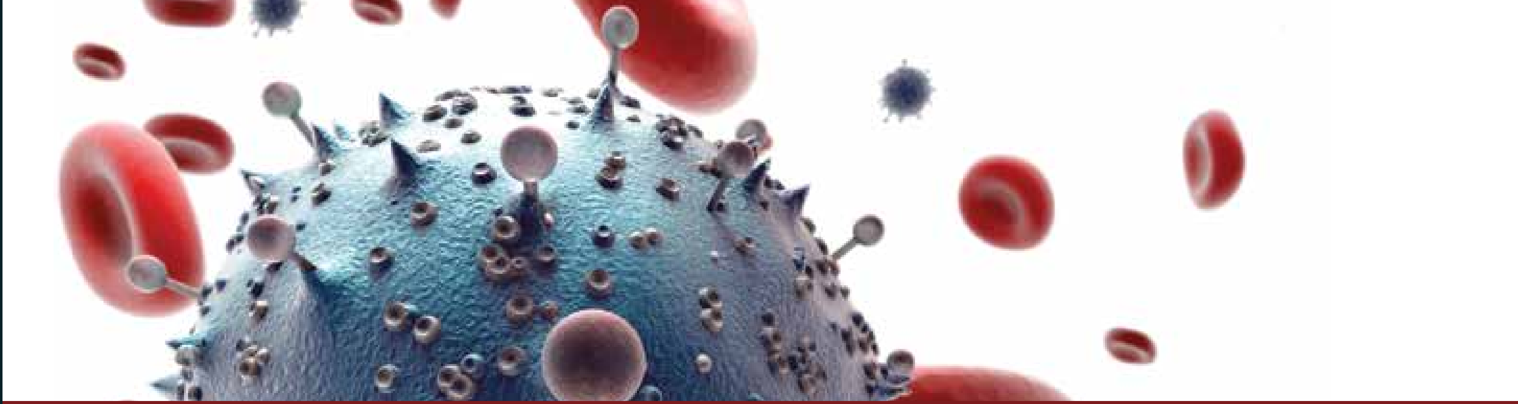
Conference Secretariat • Telephone: +27 (0)11 463 5085 • Email: jeanne@soafrica.com



UNITING NURSES IN HIV CLINICAL EXCELLENCE, BECOME A MEMBER.

Who are we?

We are a member-based Society that promotes quality, comprehensive, evidence-based HIV health care, by:

1. **LEADING • PIONEERING**
   We are a powerful, independent voice within Southern Africa with key representation from the most experienced and respected professionals working in the fight against HIV.

2. **CONNECTING • CONVENING • ENGAGING**
   Through our network of HIV practitioners, we provide a platform for engagement and facilitate learning, camaraderie and clinical consensus.

3. **ADVOCATING • INFLUENCING • SHAPING**
   With our wealth and depth of clinical expertise, we can help health care workers take their practice to a new level. We are constantly improving and expanding our knowledge, and advocating for clinical and scientific best practice.

Member Benefits

Join today and gain instant support from a credible organisation. The Society helps connect you with the best minds in HIV health care. Build your knowledge, advance your profession and make a difference by getting involved now!

- Free quarterly subscriptions to the *Southern African Journal of HIV Medicine*
- Free monthly subscription to the Society's e-newsletter, *Transcript*
- E-learning through CPD-accredited clinical case studies and on-line discussion group forums
- Free quarterly subscriptions to *HIV Nursing Matters*
- Weekly SMS clinical tips for nurse members
- Free CPD-accredited continuing education sessions
- Listing in the Society's online HIV provider referral network

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